

WEST Search History

DATE: Thursday, August 11, 2005

Hide?	<u>Set</u> <u>Name</u>	<u>Query</u>	<u>Hit</u> <u>Count</u>
	<i>DB=PGPB,USPT,EPAB; PLUR=YES; OP=ADJ</i>		
<input type="checkbox"/>	L38	L36 and biotin	3
<input type="checkbox"/>	L37	L36 and label	4
<input type="checkbox"/>	L36	L35 not @py>2002	38
<input type="checkbox"/>	L35	L34 with EDTA	49
<input type="checkbox"/>	L34	polydentate	1460
<input type="checkbox"/>	L33	L24 and detect\$	21
<input type="checkbox"/>	L32	L25 and detect\$	19
<input type="checkbox"/>	L31	L30 and label	7
<input type="checkbox"/>	L30	L24 and L12	17
<input type="checkbox"/>	L29	L28 and L12	21
<input type="checkbox"/>	L28	L27 and L12	21
<input type="checkbox"/>	L27	L22 and L12	21
<input type="checkbox"/>	L26	L24 and L22	1
<input type="checkbox"/>	L25	(5-amino-1-carboxypentyl) with (iminodiacetic acid)	23
<input type="checkbox"/>	L24	L23 or (N-(5-amino-1-carboxypentyl)-iminodiacetic acid)	25
<input type="checkbox"/>	L23	(aminobutyl-nitriloacetic acid) or AB-NTA or (N-(5-amino-1-carboxypentyl)iminodiacetic acid)	25
<input type="checkbox"/>	L22	(sulfo-NHS-biotin) or (sulfo-N-hydroxysuccinimidyl-biotin)	212
<input type="checkbox"/>	L21	L19 and detect\$	1
<input type="checkbox"/>	L20	L19 and label	0
<input type="checkbox"/>	L19	4877830.pn.	1
<input type="checkbox"/>	L18	5047513.pn.	1
<input type="checkbox"/>	L17	L16 and NTA	6
<input type="checkbox"/>	L16	L15 and biotin	23
<input type="checkbox"/>	L15	L12.ti.	379
<input type="checkbox"/>	L14	chelate\$	89911
<input type="checkbox"/>	L13	L12 and L11	15
<input type="checkbox"/>	L12	metal chelate\$	20047
<input type="checkbox"/>	L11	L10.ab.	127
<input type="checkbox"/>	L10	NTA or (nitriloacetic acid)	11087

<input type="checkbox"/>	L9	NTA or nitriloacetic acid	11087
<input type="checkbox"/>	L8	L6 and L2	1
<input type="checkbox"/>	L7	L6 and L1	1
<input type="checkbox"/>	L6	howe.in.	2576
<input type="checkbox"/>	L5	L2 and L4	1
<input type="checkbox"/>	L4	L3 with L1	61
<input type="checkbox"/>	L3	detection	670903
<input type="checkbox"/>	L2	L1.ti.	45
<input type="checkbox"/>	L1	phosphoprotein	3917

END OF SEARCH HISTORY

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1642BJF

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	FEB 28	PATDPAFULL - New display fields provide for legal status data from INPADOC
NEWS	4	FEB 28	BABS - Current-awareness alerts (SDIs) available
NEWS	5	MAR 02	GBFULL: New full-text patent database on STN
NEWS	6	MAR 03	REGISTRY/ZREGISTRY - Sequence annotations enhanced
NEWS	7	MAR 03	MEDLINE file segment of TOXCENTER reloaded
NEWS	8	MAR 22	KOREAPAT now updated monthly; patent information enhanced
NEWS	9	MAR 22	Original IDE display format returns to REGISTRY/ZREGISTRY
NEWS	10	MAR 22	PATDPASPC - New patent database available
NEWS	11	MAR 22	REGISTRY/ZREGISTRY enhanced with experimental property tags
NEWS	12	APR 04	EPFULL enhanced with additional patent information and new fields
NEWS	13	APR 04	EMBASE - Database reloaded and enhanced
NEWS	14	APR 18	New CAS Information Use Policies available online
NEWS	15	APR 25	Patent searching, including current-awareness alerts (SDIs), based on application date in CA/CAPLUS and USPATFULL/USPAT2 may be affected by a change in filing date for U.S. applications.
NEWS	16	APR 28	Improved searching of U.S. Patent Classifications for U.S. patent records in CA/CAPLUS
NEWS	17	MAY 23	GBFULL enhanced with patent drawing images
NEWS	18	MAY 23	REGISTRY has been enhanced with source information from CHEMCATS
NEWS	19	JUN 06	The Analysis Edition of STN Express with Discover! (Version 8.0 for Windows) now available
NEWS	20	JUN 13	RUSSIAPAT: New full-text patent database on STN
NEWS	21	JUN 13	FRFULL enhanced with patent drawing images
NEWS	22	JUN 27	MARPAT displays enhanced with expanded G-group definitions and text labels
NEWS	23	JUL 01	MEDICONF removed from STN
NEWS	24	JUL 07	STN Patent Forums to be held in July 2005
NEWS	25	JUL 13	SCISEARCH reloaded
NEWS	26	JUL 20	Powerful new interactive analysis and visualization software, STN AnaVist, now available
NEWS EXPRESS			JUNE 13 CURRENT WINDOWS VERSION IS V8.0, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 13 JUNE 2005
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
NEWS INTER			General Internet Information
NEWS LOGIN			Welcome Banner and News Items
NEWS PHONE			Direct Dial and Telecommunication Network Access to STN
NEWS WWW			CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 14:25:25 ON 11 AUG 2005

=> file registry

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 14:25:35 ON 11 AUG 2005

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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 10 AUG 2005 HIGHEST RN 859511-21-0

DICTIONARY FILE UPDATES: 10 AUG 2005 HIGHEST RN 859511-21-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> S 139-13-9/RN

L1 1 139-13-9/RN

=> S 142-73-4/RN

L2 1 142-73-4/RN

=> file medline

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.86	1.07

FILE 'MEDLINE' ENTERED AT 14:26:36 ON 11 AUG 2005

FILE LAST UPDATED: 9 AUG 2005 (20050809/UP). FILE COVERS 1950 TO DATE.

On December 19, 2004, the 2005 MeSH terms were loaded.

The MEDLINE reload for 2005 is now available. For details enter HELP
RLOAD at an arrow prompt (=>). See also:

<http://www.nlm.nih.gov/mesh/>
http://www.nlm.nih.gov/pubs/techbull/nd04/nd04_mesh.html

OLDMEDLINE now back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the
MeSH 2005 vocabulary.

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> s l1

L3 702 L1

=> s l2

L4 125 L2

=> s l3 or l4

L5 821 L3 OR L4

=> s biotin

18221 BIOTIN

48 BIOTINS

L6 18227 BIOTIN

(BIOTIN OR BIOTINS)

=> s l6 and l5

L7 5 L6 AND L5

=> s phosphoprotein? or (phosphorylated protein?)

34750 PHOSPHOPROTEIN?

36983 PHOSPHORYLATED

1832366 PROTEIN?

2167 PHOSPHORYLATED PROTEIN?

(PHOSPHORYLATED(W) PROTEIN?)

L8 36108 PHOSPHOPROTEIN? OR (PHOSPHORYLATED PROTEIN?)

=> s l8 and l5

L9 5 L8 AND L5

=> s l9 and l7

L10 0 L9 AND L7

=> d ibib l7 1-5

L7 ANSWER 1 OF 5

MEDLINE on STN

ACCESSION NUMBER: 2005206297 MEDLINE

DOCUMENT NUMBER: PubMed ID: 15839649

TITLE: Electrogeneration of a poly(pyrrole)-NTA chelator film for
a reversible oriented immobilization of histidine-tagged
proteins.

AUTHOR: Haddour Naoufel; Cosnier Serge; Gondran Chantal

CORPORATE SOURCE: Laboratoire d'Electrochimie Organique et de Photochimie

Redox (CNRS UMR 5630), Institut de Chimie Moleculaire de
Grenoble FR CNRS 2607, Universite Joseph Fourier, BP 53,
38041 Grenoble Cedex 9, France.

SOURCE: Journal of the American Chemical Society, (2005 Apr 27) 127
(16) 5752-3.
Journal code: 7503056. ISSN: 0002-7863.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200507
ENTRY DATE: Entered STN: 20050421
Last Updated on STN: 20050726
Entered Medline: 20050725

L7 ANSWER 2 OF 5 MEDLINE on STN
ACCESSION NUMBER: 2003464070 MEDLINE
DOCUMENT NUMBER: PubMed ID: 14526081
TITLE: Self-assembly of proteins into designed networks.
AUTHOR: Ringler Philippe; Schulz Georg E
CORPORATE SOURCE: Institut fur Organische Chemie und Biochemie,
Albert-Ludwigs-Universitat Freiburg, Albertstrasse 21,
D-79104 Freiburg im Breisgau, Germany.
SOURCE: Science, (2003 Oct 3) 302 (5642) 106-9.
Journal code: 0404511. ISSN: 1095-9203.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200310
ENTRY DATE: Entered STN: 20031004
Last Updated on STN: 20031025
Entered Medline: 20031024

L7 ANSWER 3 OF 5 MEDLINE on STN
ACCESSION NUMBER: 97373802 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9230285
TITLE: Iron-induced apoptosis in mouse renal proximal tubules
after an injection of a renal carcinogen,
iron-nitritotriacetate.
AUTHOR: Kawabata T; Ma Y; Yamadori I; Okada S
CORPORATE SOURCE: Department of Pathology, Okayama University Medical School,
Shikata-cho, Japan.
SOURCE: Carcinogenesis, (1997 Jul) 18 (7) 1389-94.
Journal code: 8008055. ISSN: 0143-3334.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199708
ENTRY DATE: Entered STN: 19970813
Last Updated on STN: 19970813
Entered Medline: 19970807

L7 ANSWER 4 OF 5 MEDLINE on STN
ACCESSION NUMBER: 97317982 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9174965
TITLE: Interactions and applications of soluble heterobifunctional
affinity chelating polymers in immobilized metal affinity
chromatography.
AUTHOR: Ehteshami G; Porath J; Guzman R
CORPORATE SOURCE: Department of Chemical and Environmental Engineering,
University of Arizona, Tucson 85721, USA.

SOURCE: Journal of molecular recognition : JMR, (1996 Sep-Dec) 9
(5-6) 733-7.
Journal code: 9004580. ISSN: 0952-3499.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199708
ENTRY DATE: Entered STN: 19970902
Last Updated on STN: 19970902
Entered Medline: 19970818

L7 ANSWER 5 OF 5 MEDLINE on STN
ACCESSION NUMBER: 96207226 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8619473
TITLE: Single-step synthesis and characterization of biotinylated
nitrilotriacetic acid, a unique reagent for the detection
of histidine-tagged proteins immobilized on nitrocellulose.
AUTHOR: McMahan S A; Burgess R R
CORPORATE SOURCE: McArdle Laboratory for Cancer Research, University of
Wisconsin-Madison, 53706, USA.
CONTRACT NUMBER: CA07175 (NCI)
GM28575 (NIGMS)
SOURCE: Analytical biochemistry, (1996 Apr 5) 236 (1) 101-6.
Journal code: 0370535. ISSN: 0003-2697.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199606
ENTRY DATE: Entered STN: 19960620
Last Updated on STN: 19970203
Entered Medline: 19960613

=> d ibib abs kwic 17 4

L7 ANSWER 4 OF 5 MEDLINE on STN
ACCESSION NUMBER: 97317982 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9174965
TITLE: Interactions and applications of soluble heterobifunctional
affinity chelating polymers in immobilized metal affinity
chromatography.
AUTHOR: Ehteshami G; Porath J; Guzman R
CORPORATE SOURCE: Department of Chemical and Environmental Engineering,
University of Arizona, Tucson 85721, USA.
SOURCE: Journal of molecular recognition : JMR, (1996 Sep-Dec) 9
(5-6) 733-7.
Journal code: 9004580. ISSN: 0952-3499.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199708
ENTRY DATE: Entered STN: 19970902
Last Updated on STN: 19970902
Entered Medline: 19970818

AB The interaction of immobilized metal-chelating adsorbents with a dual
heterobifunctional soluble polyethylene glycol (PEG) of the form X-PEG-Y
is described, where X represents an affinity ligand and Y a chelating
agent. The bifunctional PEG derivative used in this study was
biotin-PEG-iminodiacetic acid (IDA). Affinity and metal binding
constants of this conjugate for copper and avidin were found to be in

excellent agreement with the binding affinities of the corresponding unconjugated groups IDA and **biotin**, respectively. The characteristics of the interaction of this bifunctional derivative is described in terms of its adsorption in immobilized metal affinity chromatographic (IMAC) adsorbents. The results show that this derivative can be reversibly and selectively bound to specific IMAC adsorbents under certain experimental conditions. This immobilized scheme resembles a system where an IMAC adsorbent was transformed into an affinity adsorbent as a result of the interactions of both chelating derivatives, one in solution (**biotin**-PEG-IDA) and the other on the solid matrix (IMAC adsorbent). Apparently the modified IMAC adsorbents, once the affinity chelating ligands are attached, exhibit characteristics similar to those of covalently bound affinity ligands in affinity chromatographic systems.

AB . . . where X represents an affinity ligand and Y a chelating agent. The bifunctional PEG derivative used in this study was **biotin**-PEG-iminodiacetic acid (IDA). Affinity and metal binding constants of this conjugate for copper and avidin were found to be in excellent agreement with the binding affinities of the corresponding unconjugated groups IDA and **biotin**, respectively. The characteristics of the interaction of this bifunctional derivative is described in terms of its adsorption in immobilized metal. . . adsorbent was transformed into an affinity adsorbent as a result of the interactions of both chelating derivatives, one in solution (**biotin**-PEG-IDA) and the other on the solid matrix (IMAC adsorbent). Apparently the modified IMAC adsorbents, once the affinity chelating ligands are. . .

CT Avidin

Biotin

*Chelating Agents: CH, chemistry
*Chromatography, Affinity: MT, methods
*Imino Acids: CH, chemistry
*Nickel
*Polyethylene Glycols: CH, chemistry
*Polymers: CH, . . .

RN 1405-69-2 (Avidin); 142-73-4 (iminodiacetic acid); 58-85-5 (Biotin); 7440-02-0 (Nickel)

=> d ibib kwic 17 5

L7 ANSWER 5 OF 5 MEDLINE on STN
ACCESSION NUMBER: 96207226 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8619473
TITLE: Single-step synthesis and characterization of biotinylated nitrilotriacetic acid, a unique reagent for the detection of histidine-tagged proteins immobilized on nitrocellulose.
AUTHOR: McMahan S A; Burgess R R
CORPORATE SOURCE: McArdle Laboratory for Cancer Research, University of Wisconsin-Madison, 53706, USA.
CONTRACT NUMBER: CA07175 (NCI)
GM28575 (NIGMS)
SOURCE: Analytical biochemistry, (1996 Apr 5) 236 (1) 101-6.
Journal code: 0370535. ISSN: 0003-2697.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199606
ENTRY DATE: Entered STN: 19960620
Last Updated on STN: 19970203
Entered Medline: 19960613

AB . . . Using a one-step reaction, a bifunctional compound was synthesized for detecting histidine-tagged proteins immobilized on

nitrocellulose. This compound has a **biotin** as one functional group and a nitrilotriacetic acid as the other. The nitrilotriacetic acid is used to chelate a Ni(II). . . at four of its six coordination sites. The remaining two sites are available for binding to a histidine tag. The **biotin** functional group can then be detected using a streptavidin-horseradish peroxidase conjugate and chemiluminescence. Using this biotinylated nitrilotriacetic acid, it is. . .

CT ***Biotin: AA, analogs & derivatives**

*Blotting, Western: MT, methods

Collodion: CH, chemistry

Hela Cells

*Histidine: CH, chemistry

Humans

Lysine: AA, analogs. . .

RN **139-13-9 (Nitrilotriacetic Acid)**; 56-87-1 (Lysine); 576-19-2 (biocytin); **58-85-5 (Biotin)**; 71-00-1 (Histidine); 7440-02-0 (Nickel); 9004-70-0 (Collodion)

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

3.61

4.68

FILE 'CAPLUS' ENTERED AT 14:29:54 ON 11 AUG 2005

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FILE COVERS 1907 - 11 Aug 2005 VOL 143 ISS 7

FILE LAST UPDATED: 10 Aug 2005 (20050810/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l1

L11 5866 L1

=> s l2

L12 2683 L2

=> s l11 or l12

L13 7763 L11 OR L12

=> s biotin

27720 BIOTIN

107 BIOTINS

L14 27729 BIOTIN

(BIOTIN OR BIOTINS)

=> s 114 and 113
L15 59 L14 AND L13

=> s 114 (S) 113
L16 1 L14 (S) L13

=> d ibib

L16 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1997:335638 CAPLUS
DOCUMENT NUMBER: 127:113815
TITLE: Interactions and applications of soluble
heterobifunctional affinity chelating polymers in
immobilized metal affinity chromatography
AUTHOR(S): Ehteshami, Gholam; Porath, Jerker; Guzman, Roberto
CORPORATE SOURCE: Dep. Chem. and Environmental Eng., Univ. Arizona,
Tucson, AZ, 85721, USA
SOURCE: Journal of Molecular Recognition (1996), 9(5/6),
733-737
CODEN: JMORE4; ISSN: 0952-3499
PUBLISHER: Wiley
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s metal (S) chelate
1586829 METAL
804547 METALS
1925374 METAL
(METAL OR METALS)
42846 CHELATE
26684 CHELATES
56804 CHELATE
(CHELATE OR CHELATES)
L17 16297 METAL (S) CHELATE

=> s 117 and biotin
27720 BIOTIN
107 BIOTINS
27729 BIOTIN
(BIOTIN OR BIOTINS)
L18 48 L17 AND BIOTIN

=> s biotin?
L19 34792 BIOTIN?

=> s 119 (S) 117
L20 15 L19 (S) L17

=> s phosphoprotein? or (phosphorylated protein)
45761 PHOSPHOPROTEIN?
49755 PHOSPHORYLATED
1771752 PROTEIN
1232953 PROTEINS
2059138 PROTEIN
(PROTEIN OR PROTEINS)
2684 PHOSPHORYLATED PROTEIN
(PHOSPHORYLATED (W) PROTEIN)
L21 47200 PHOSPHOPROTEIN? OR (PHOSPHORYLATED PROTEIN)

=> s 121 and 120

L22 0 L21 AND L20

=> s 120 and phospho
10189 PHOSPHO
12 PHOSPHOS
10201 PHOSPHO
(PHOSPHO OR PHOSPHOS)

L23 0 L20 AND PHOSPHO

=> s 120 and (label or detec?)
57629 LABEL
19525 LABELS
69004 LABEL
(LABEL OR LABELS)
1485448 DETEC?

L24 8 L20 AND (LABEL OR DETEC?)

=> s 124 not py>2002
2913018 PY>2002

L25 6 L24 NOT PY>2002

=> d ibib 1-3

L25 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:593243 CAPLUS
DOCUMENT NUMBER: 135:164456
TITLE: Method for carrying out a homogeneous-immunoassay
based on agglutination using Fab'-biotin
INVENTOR(S): Deger, Arno; Guillot, Francois; Berger, Michael;
Schlieper, Dittmar
PATENT ASSIGNEE(S): Boehringer Mannheim G.m.b.H., Germany
SOURCE: U.S., 8 pp., Cont.-in-part of U.S. Ser. No. 71,593,
abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6274325	B1	20010814	US 1994-314432	19940928
DE 4020204	A1	19920102	DE 1990-4020204	19900625
PRIORITY APPLN. INFO.:			DE 1990-4020204	A 19900625
			US 1991-715593	B2 19910621
			US 1991-718798	B1 19910621
			US 1993-71593	B2 19930603
REFERENCE COUNT:	14	THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT		

L25 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:308592 CAPLUS
DOCUMENT NUMBER: 130:308808
TITLE: Method for affinity labelling of oligomers or polymers
INVENTOR(S): Lopez-Calle, Eloisa; Henco, Karsten
PATENT ASSIGNEE(S): EVOTEC BioSystems A.-G., Germany
SOURCE: Ger. Offen., 14 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19745001	A1	19990506	DE 1997-19745001	19971011
PRIORITY APPLN. INFO.:			DE 1997-19745001	19971011

L25 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:324967 CAPLUS

DOCUMENT NUMBER: 129:3853

TITLE: Receptor binding assay, appropriate recombinant fusion receptor for this assay, vector for its production and reagent kit for implementing the receptor binding assay

INVENTOR(S): Loos, Ulrich; Minich, Waldemar B.

PATENT ASSIGNEE(S): B.R.A.H.M.S Diagnostica G.m.d.H., Germany; Loos, Ulrich; Minich, Waldemar B.

SOURCE: PCT Int. Appl., 43 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9820343	A2	19980514	WO 1997-EP6121	19971105
WO 9820343	A3	19980716		
W: JP, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
DE 19645729	C1	19980604	DE 1996-19645729	19961106
DE 19728991	A1	19990211	DE 1997-19728991	19970707
EP 938679	A2	19990901	EP 1997-952757	19971105
EP 938679	B1	20020724		
R: AT, BE, CH, DE, FR, IT, LI				
JP 2001505764	T2	20010508	JP 1998-521059	19971105
AT 221204	E	20020815	AT 1997-952757	19971105
PRIORITY APPLN. INFO.:			DE 1996-19645729	A 19961106
			DE 1997-19728991	A 19970707
			WO 1997-EP6121	W 19971105

=> d kwic 1

L25 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

AB . . . carry streptavidin or avidin. The invention also concerns the Fab'-biotin which is bound or linked via linkage groups to a **label** compound which can electrochemiluminesce. The particles having avidin or streptavidin on their surface are magnetic. Use of anti-TSH Fab'-biotin conjugate. . .

IT Chelates

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (as **labels**; homogeneous agglutination immunoassay using Fab'-biotin and avidin or streptavidin agglutinatable particles)

IT Luminescence, chemiluminescence

(electrochemiluminescence, **labels** for; homogeneous agglutination immunoassay using Fab'-biotin and avidin or streptavidin agglutinatable particles)

IT Ligands

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (multidentate, as **labels**; homogeneous agglutination immunoassay using Fab'-biotin and avidin or streptavidin agglutinatable particles)

IT 110-86-1D, Pyridine, derivs., uses 10199-00-5, Bipyrazine 12678-01-2D, Phenanthroline, derivs. 37275-48-2, Bipyridyl

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(as **label**; homogeneous agglutination immunoassay using
Fab'-biotin and avidin or streptavidin agglutinatable particles)

IT 7439-88-5D, Iridium, **metal chelates**, uses
7439-98-7D, Molybdenum, **metal chelates**, uses
7440-04-2D, Osmium, **metal chelates**, uses 7440-05-3D,
Palladium, **metal chelates**, uses 7440-06-4D,
Platinum, **metal chelates**, uses 7440-15-5D, Rhenium,
metal chelates, uses 7440-16-6D, Rhodium,
metal chelates, uses 7440-18-8D, Ruthenium,
metal chelates, uses 7440-26-8D, Technetium,
metal chelates, uses 7440-33-7D, Tungsten,
metal chelates, uses 7440-47-3D, Chromium,
metal chelates, uses 7440-50-8D, Copper, **metal**
chelates, uses 7440-74-6D, Indium, **metal**
chelates, uses

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(homogeneous agglutination immunoassay using Fab'-**biotin** and
avidin or streptavidin agglutinatable particles)

=> file his

'HIS' IS NOT A VALID FILE NAME

SESSION CONTINUES IN FILE 'CAPLUS'

Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files
that are available. If you have requested multiple files, you can
specify a corrected file name or you can enter "IGNORE" to continue
accessing the remaining file names entered.

=> d his

(FILE 'HOME' ENTERED AT 14:25:25 ON 11 AUG 2005)

FILE 'REGISTRY' ENTERED AT 14:25:35 ON 11 AUG 2005

L1 1 S 139-13-9/RN
L2 1 S 142-73-4/RN

FILE 'MEDLINE' ENTERED AT 14:26:36 ON 11 AUG 2005

L3 702 S L1
L4 125 S L2
L5 821 S L3 OR L4
L6 18227 S BIOTIN
L7 5 S L6 AND L5
L8 36108 S PHOSPHOPROTEIN? OR (PHOSPHORYLATED PROTEIN?)
L9 5 S L8 AND L5
L10 0 S L9 AND L7

FILE 'CAPLUS' ENTERED AT 14:29:54 ON 11 AUG 2005

L11 5866 S L1
L12 2683 S L2
L13 7763 S L11 OR L12
L14 27729 S BIOTIN
L15 59 S L14 AND L13
L16 1 S L14 (S) L13
L17 16297 S METAL (S) CHELATE
L18 48 S L17 AND BIOTIN
L19 34792 S BIOTIN?
L20 15 S L19 (S) L17
L21 47200 S PHOSPHOPROTEIN? OR (PHOSPHORYLATED PROTEIN)
L22 0 S L21 AND L20
L23 0 S L20 AND PHOSPHO
L24 8 S L20 AND (LABEL OR DETEC?)
L25 6 S L24 NOT PY>2002

=> file pctfull
COST IN U.S. DOLLARS
FULL ESTIMATED COST

SINCE FILE	TOTAL
ENTRY	SESSION
32.10	36.78

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-0.73	-0.73

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FILE 'PCTFULL' ENTERED AT 14:34:05 ON 11 AUG 2005
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FILE LAST UPDATED: 9 AUG 2005 <20050809/UP>
MOST RECENT UPDATE WEEK: 200531 <200531/EW>
FILE COVERS 1978 TO DATE

>>> IMAGES ARE AVAILABLE ONLINE AND FOR EMAIL-PRINTS <<<

=> s nta

7276 NTA
24 NTAS
L26 7296 NTA
(NTA OR NTAS)

=> s nitriloacetic acid

921 NITRILOACETIC
245294 ACID
164169 ACIDS
254679 ACID
(ACID OR ACIDS)
L27 908 NITRILOACETIC ACID
(NITRILOACETIC(W)ACID)

=> s (iminodiacetic acid) or IDA

1234 IMINODIACETIC
245294 ACID
164169 ACIDS
254679 ACID
(ACID OR ACIDS)
1186 IMINODIACETIC ACID
(IMINODIACETIC(W)ACID)
2011 IDA
111 IDAS
2095 IDA
(IDA OR IDAS)
L28 3068 (IMINODIACETIC ACID) OR IDA

=> s 126 or 127

L29 7802 L26 OR L27

=> s 126 and 127

L30 402 L26 AND L27

=> s (iminodiacetic acid) and IDA

1234 IMINODIACETIC
245294 ACID
164169 ACIDS
254679 ACID
(ACID OR ACIDS)
1186 IMINODIACETIC ACID
(IMINODIACETIC(W)ACID)
2011 IDA

111 IDAS
2095 IDA
(IDA OR IDAS)
L31 213 (IMINODIACETIC ACID) AND IDA

=> s 130 or 131
L32 609 L30 OR L31

=> s biotin (S) 132
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'BIOTIN (S) L32'
30002 BIOTIN
299 BIOTINS
30023 BIOTIN
(BIOTIN OR BIOTINS)
L33 406 BIOTIN (S) L32

=> s 131 (S) biotin?
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L31 (S) BIOTIN?'
36647 BIOTIN?
L34 56 L31 (S) BIOTIN?

=> s 134 not py>2002
294498 PY>2002
L35 32 L34 NOT PY>2002

=> d ibib kwic

L35 ANSWER 1 OF 32 PCTFULL COPYRIGHT 2005 Univentio on STN
ACCESSION NUMBER: 2002094998 PCTFULL ED 20021210 EW 200248
TITLE (ENGLISH): ANALYZING PHOSPHORYLATED PROTEINS
TITLE (FRENCH): ANALYSE DE PROTEINES PHOSPHORYLEES
INVENTOR(S): SINGH, Sharat, 3420 Royal Meadow Lane, San Jose, CA
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Menlo Park, CA 94026\$, US
LANGUAGE OF FILING: English
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PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2002094998	A2	20021128

DESIGNATED STATES

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR
CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID
IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD
MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI
SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW
RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

RW (EAPO):	AM AZ BY KG KZ MD RU TJ TM
RW (EPO):	AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
RW (OAPI):	BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
APPLICATION INFO.:	WO 2002-US16100 A 20020521
PRIORITY INFO.:	US 2001-60/292,548 20010521
	US 2001-60/334,902 20011024

DETD . . . metal ions. Preferably, an IMAC resin comprises a conventional chromatographic matrix such as agarose, acrylamide, silica, or the like. Metal chelators include

iminodiacetic acid (IDA), nitriloacetic acid (NTA), tetradentate, and the like. Exemplary metal ions include Cu, Ni²⁺, Zn²⁺, CO²⁺, Fe(III), Sc(III), Al(III), Lu(HI), Th(III), . . .

. . . antibody together with a secondary antibody having e-tags attached, a haptenized antibody together with a secondary anti-hapten antibody having e-tags attached, a

biotinylated antibody together with streptavidin having e-tags attached, an antibody derivatized with a functionalized polymer that, in turn, has e-tags attached, or.

. . . during the preparation, aberrant cleavage, etc., or other nonspecific degradation products of the polypeptide binding moiety. As above, a ligand, exemplified by **biotin**, is attached to the polypeptide-binding region so as to be separated from the e-tag reporter upon cleavage.

. . . by the addition of a positively charged moiety or moieties, such as ammonium groups, basic amino acids, etc. Avidin binds to the **biotin** attached to the detection probe and its degradation products. Avidin is positively charged, while the cleaved electrophoretic tag is negatively charged..

. . . the e-tag reporter, these molecules will migrate toward the opposite electrode from the released e-tag reporter molecules. For example, one could use **biotin** and streptavidin, where streptavidin carries a positive charge. In the case of a peptide analyte, one embodiment would have cleavage at . . . pyrazolone of the modified methionine, one could bond to an available lysine. The amino group of the pyrazolone would be substituted with **biotin**. Cleavage would then be achieved with cyanogen bromide, releasing the e-tag reporter, but the **biotin** would remain with the peptide and any e-tag moiety that was not released from the binding member. Avidin is then used. . .

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Example I

e-Tag Reporter Assay for Protein Analysis

A. Labeling of aminodextran (MW -500,000) with an e-tag moiety and **biotin**

Aminodextran was used as a model for demonstrating e-tag reporter release in relation to a high molecular weight molecule, which also serves. . . number of amino

groups for 10 mg aminodextran was calculated as 2×10^{-9} moles. For a ratio of 1:4 **biotin** to e-tag moiety, the number of moles of **biotin** NHS ester employed was 1.85×10^{-6} , and the number of moles of maleimide NHS ester was 7.4×10^{-9} mg of aminodextran was dissolved in 6 mL of 0.1 % PBS buffer. 10 mg of **Biotin**-x-x NHS ester and 23.7 mg of EMCS were dissolved together in 1 mL of DMF and added in 50 gL portions. . .

B. Reaction of **biotin** and maleimide labeled aminodextran with the moiety, SAMSA.

e-tag moiety to react with maleimide in the aminodextran molecule. For this purpose 0.3 mg (3×10^{-9} moles) of **biotin** and EMCS labeled with aminodextran were dissolved in 1 mL of water.

immunoassay for cytokines

1. 10 gL of assay buffer (0.1X PBS, 40 mg/mL BSA) is mixed with 1 mL (100 nM) of

biotin-labeled anti-human IL-4 monoclonal antibody (purchased from Pierce, catalogue number

M 13) and 1 mL of cytokine IL-4 (Pierce, catalogue number R-IL. . .

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Protocol for direct immunoassay for human IgG

1. 10 gL of assay buffer (0.1X PBS, 40 mg/mL BSA) is mixed with 1 gL (100 nM) of

biotin-labeled anti-human IgG antibody and 1 mL of human IgG (from Sigma) labeled with an

e-tag moiety ranging in concentration from 0. . .